

HEMIPTERA FROM THE BOMBAY PRESIDENCY

BY

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The Hemiptera dealt with in this paper were collected and forwarded to me for study several years ago by Mr. R. C. Wroughton. Two new genera and some of the new species contained in the collection have been described by me in previous papers, and another new genus and species was described by the late Prof. Reuter. I now give a list of all the Hemiptera found by Mr. Wroughton, having marked with an asterisk the species that were undescribed when discovered by him. Only four of these species have as yet been found outside the Bombay Presidency, though they all are doubtless more widely spread. Bibliographical references are appended only to the species not described in Distant's "Fauna of British India : Rhynchota."

Suborder HETEROPTERA.

Fam. THYREOCORIDÆ.

1. *Aethus indicus*, Westw.
2. *Macroscythus foveola*, Dall.
- *3. *Macroscythus longirostris*, n. sp.

Subovatus, convexiusculus, niger. Caput nonnihil transversum, rugosum, apice distincte incisum, rostro piceo coxas posticas superante, articulis tribus ultimis subæque longis, antennis piceis, articulis duobus primis sublinearibus glabris, ceteris nonnihil incrassatis pallido-puberulis, articulo secundo primo subbreviore, tertio secundo distincte longiore, quarto tertio et quinto quarto paullo longiore. Pronotum capite triplo latius, transversim vix impressum, lateribus parce ferrugineo-ciliatum, parte antica disci apice et lateribus modice dense punctata, ceteroquin lævi sed medio serie longitudinali punctorum interrupta, parte postica disci parce punctata, basi lævi. Scutellum remote punctatum. Hemelytra apicem abdominis nonnihil superantia, corio sat parce punctulato, basin segmenti ultimi connexivi attingente, intra marginem lateralem punctis piligeris duobus vel tribus instructum linea impressa percurrente prædito, margine apicali late levissime sinuato, membrana leviter infuscata. Abdomen subtus medio læve, lateribus irregulariter punctulatum. Pedes piceo-nigri, tarsis dilutioribus. Long. ♀ 7.5 mm.

The length of the rostrum would place this species in the genus *Gampsotes* Sign., but the *facies* is so different from that genus, that it is much better placed in *Macroscythus*, all other characters of which it has.

4. *Peltoxys brevipennis*, Fabr.

Parallelus, glaber, niger, et supra et subtus creberrime punctatus, capite et parte apicali pronoti pilis paucis longis præditis, ventre brevissime pubescente, lituris nonnullis dimidiū antici pronoti, area parva oblonga prope angulos basales scutelli, vitta angusta intra marginem lateralem prosterni hujusque margine basali lævibus, rostro et tarsis testaceis. Caput subæque longum ac latum, tylo latiusculo, percurrente, jugis extus ante oculos subparallelis, deinde fortiter rotundatis, articulo primo antennarum apicem capitis attingente, secundo brevissimo quam primo breviore, tertio secundo saltem triplo longiore, apicem versus sensim incrassato, quarto tertio

subæquilongo, subfusiformi (art. quintus deest in specimine descripto), rostro coxas medias attingente, articulo tertio secundo paullo brevior et quarto plus quam dimidio longiore. Mesosternum in fundo impressionis mediæ carinatum. Sulcus officialis prope marginem anticum metasterni currens. Hemelytra abdomine paullo breviora, corio angulo apicali anguste rotundato, margine apicali in dimidio interno sinuato, membrana pellucida, leviter fusco-umbrata. Anguli apicales segmentorum abdominis levissime prominuli. Long. ♀ 4 mm.

Stål's and Signoret's descriptions of this rare insect are erroneous in several points, owing no doubt to the circumstance that they had only seen ill-preserved specimens. Dr. Horváth having kindly examined the specimen in the Budapest Museum, upon which Signoret founded his description, has found that it belongs to the same species as my specimen. The tubercles in the middle of the lateral margins of the abdominal segments described and figured by Signoret are, as Dr. Horváth writes to me, only small particles of dirt.

Fam.—SCUTELLERIDÆ.

5. *Scutellera perplexa*, Westw. (*nobilis*, Fabr. nec. L.)

6. *Chrysocoris purpureus*, Westw.

The ground-colour of the living insect and of specimens preserved in spirit is brassy green; in dried specimens it passes into purplish.

FAM. PENTATOMIDÆ.

*7. *Scotinophara Westwoodi*, n. sp.

Ovalis, nigra, brevissime adpresse ochreo-squamulosa, dense punctulata, corio cum clavo remotius punctato, vitta obliqua sublaterali pronoti, hujus lobo antico, corio cum clavo, lateribus pleurarum ac limbo lato laterali ventris stramineo-variegatis, callo parvo prope angulos basales scutelli, tuberculo ad angulos apicales segmentorum ventralium summoque apice articularum quattuor primorum antennarum stramineis, apice scutelli, rostro, tibiis posticis ac tarsis omnibus fuscis, articulationibus rostri plus minusve late stramineis, membrana hyalina, limbo laterali externo infuscato. Caput latitudine paullo longius, tuberculis antenniferis obtusiusculis, articulo secundo antennarum primo paullo longiore, tertio secundo vie duplo longiore, quarto tertio distincte brevior, quinto omnium longissimo, rostro basin segmenti tertii ventralis paullum superante. Pronotum ante medium distincte transversim impressum, antice modice declive, margine apicali depresso, parte postoculari subsinuato-truncato, dente angulorum lateralium dente apicale paullo minore, marginibus lateralibus anticis inermibus, distincte sinuatis, ante sinum leviter rotundatis. Scutellum saltem in mare apicem abdominis paullum superans, mox pone basin quadrantis secundi distincte constrictum, apice obtuse angulato-sinuatum. Segmentum sextum ventrale maris medio segmentis tribus præcedentibus unitis subæquilongum. Segmentum genitale maris apice utrinque sinuatum. Long. ♂ 8 mm.

This species seems to be akin to *S. nigra*, Dall., but it is partly variegated with yellow, the pronotum is not gibbous in front, and the scutellum is longer.

8. *Halya dentata*, Fabr.

9. *Laprius variicornis*, Dall.

*10. *Halyomorpha picticornis*, n. sp.

Oblongo-ovalis, testacea, supra inæqualiter acervatim fusco-punctata, vittis duabus ante medium pronoti subvirescenti-nigris apice scutelli pallidiore, linea longitudinali media pronoti et angulis basalibus scutelli lævibus, segmentis connexivi medio concoloriter punctatis, basi et apice fascia nigra notatis, capite subtus, metapleuris lateribusque ventris

inæqualiter fusco-punctatis, vitta lata maculas aliquot testaceas includente propleuræ et mesopleuræ, macula majuscula marginali paullo ante angulos laterales propleurarum, fascia brevi mox ante angulos apicales segmentorum ventris maculaque media segmentorum hujus secundi et sexti piceo-nigris, mesosterno medio (carina excepta) fusco. Caput pronoto medio subæque longum, rostro basin ventris attingente, testaceo, articulo ultimo nigro, antennis testaceis, articulis tribus primis fusco-punctatis, primo præterea subtus fusco-vittato, quarto toto et parte plus quam dimidia apicali quini fuscis, articulo testio secundo paullo longiore, quarto tertio parum longiore, quinto quarto subæque longo. Pronotum margine apicali interoculari anguste sed distincte elevatum, marginibus lateralibus post medium non nisi levissime sinuatis. Hemelytra apicem abdominis paulum superantia, corio basin segmenti quinti connexivi superante, membrana cinerascete, intus prope basin et medio fusco-tincta. Abdomen subtus medio sublæve, segmento sexto maris medio quinto vix dimidio longiore, segmento genitali maris apice leviter arcuato-sinuato. Pedes testacei, femoribus (posteriorum parte basali excepta) et tibiis anterioribus maculis punctiformibus nigris conspersis, tibiis superne linea purpurea (in anticis minus distincta) signatis, apice late nigris, posticis etiam annulo subbasali nigro præditis, tarsis apice fuscis. Long. ♂ 12 mm.

Differs from *Halyomorpha*, Mayr, as defined by Stål, by having the pronotal apical margin distinctly though narrowly elevated; from this genus as restricted by Jeannel it differs by the male genital segment which is not deeply and angularly sinuate. As the other Indian species of the genus are imperfectly known, it is unnecessary for the present to separate it generically.

* 11. *Gulielmus laterarius*, Dist.

* 12. *Eusarcocoris proximus*, n. sp.

Late subovalis, flavotestaceus, dense nigro-punctatus, capite, articulo apicali rostri, macula transversa solum medio punctata nonnihil pone angulos apicales pronoti, ventre (limbo lato laterali excepto) maculaque ablongula ad angulos apicales segmentorum ventris nigris, antennis apicem versus nonnihil infuscatis, spiraculis fuscis, callo parvulo transverso prope angulos basales scutelli et margine laterali pronoti ventrisque lævibus, pedibus nigro-punctatis. Caput creberrime punctatum, cupreo-tinctum, articulis secundo et tertio antennarum æque longis, quarto tertio sesqui longiore, quinto quarto paullo longiore. Pronotum lateribus vix sinuatum, angulis lateralibus rotundatis, levissime prominulis. Scutellum abdomine nonnihil brevius, basi quam parte subapicali duplo latius, frenis medium scutelli vix attingentibus. Hemelytra apicem abdominis nonnihil superantia, corio scutello paullo longiore, membrana subhyalina. Segmentum genitale maris apice sat anguste et profunde sinuatum, fundo sinus arcuato. Long. ♂ 5 mm.

Distinguished from *E. guttigerus*, Thumb., by the considerably narrower postfrenal part of the scutellum.

13. *Nezara viridula*, L.

14. *Menida flavovarva*, Dall.

15. *Menida formosa*, Westw.

16. *Piezodorus rubrofasciatus*, Fabr.

17. *Cyclopetta obscura*, Lep.-Serv.

The specimens belong to Westwood's variety *siccifolia*.

FAM. ARADIDÆ.

18. *Mezira triangula*, Bergr.

FAM. COREIDÆ.

*19. *Aschistocoris bombeus*, Bergr., Ann. Soc. Ent. Belg. 1909, p. 185.

20. *Notobitus dorsalis*, Westw.
 21. *Cletus pugnator*, Fabr.
 22. *Cletus bipunctatus*, H. Sch., Wanz. Ins. VI, 9, fig. 566; Stål, Enum. Hem. III, 78 (1873).

This very distinct and easily recognizable species has hitherto been recorded only from Java. Vol. VI of Herrich-Schöffer's work was finished in 1842, but it was published in parts, and there can be little doubt that the first Part, which contains the description of *C. bipunctatus*, appeared in 1840, or possibly at the end of 1839. *C. bipunctatus*, Westw. (1842), described under the same name by Distant in his Indian Fauna, is a synonym of the true *pugnator*, Fabr., which is not identical with *trigonus*, Thunb.

23. *Clavigralla horrens*, Dohrn.
 24. *Leptocorixa varicornis*, Fabr.
 25. *Dulichius inflatus*, Kirby.
 *26. *Euthetus pulcherrimus*, Bergr., Ann. Soc. Ent. Belg. 1909, p. 186.
 27. *Riptortus pedestris*, Fabr.
 28. *Leptocoris*, sp.

Brachypterous form: hemelytra somewhat passing base of antepenultimate (♀) or penultimate (♂) abdominal segment, corium with sinuate apical margin and rounded apical angle, membrane extremely short, not reaching beyond apical angle of corium.

Possibly the hitherto unknown brachypterous form of *L. augur* Fabr., with which it agrees fairly well, though it is much smaller (length, ♂ 9 mm., ♀ 10.5 mm.)

Fam. PYRRHOCORIDÆ.

29. *Odontopus nigricornis*, Stål.
 30. *Dysdercus Koenigi*, Fabr.

Fam. MYODOCHIDÆ.

31. *Pyrrhobaphus servus*, Fabr.
 32. *Pamera Nietneri*, Dohrn.
 *33. *Caridops gibba*, Bergr.
 *34. *Prostemmidea mimica*, Reut.
 35. *Lachnesticus singalensis*, Dohrn.

On this species Reuter founded the genus *Lachnophorus* (by a misprint called "*Lachnophorus*") but as Dejean has described a genus of Carabidæ under the same name I propose the name *Lachnesticus* for Reuter's genus.

36. *Aphanus sordidus*, Fabr.
 37. *Aphanus leucoceras*, Walk.

This species has somewhat the aspect of a *Dieuches* and was by Distant referred to that genus, but the short basal joint of the antennæ and the non-tuberculate male genital segment place it in *Aphanus*. As a synonym of this species Distant wrongly cites *Dieuches modestus*, Horv.

38. *Dieuches femoralis*, Dohrn.
 *39. *Dieuches hypocrita*, n. sp.

Niger, dimidio basali corii, membrana ventreque fuscis, limbo laterali prothoracis (non tamen postice), maculis duabus parvis transversis marginis apicalis pronoti, linea longitudinali media postice evanescente lobi hujus postici, macula parva utrinque justa hanc, maculis duabus parvis mediis apiseque scutelli, margine angusto interiore et commissurali clavi, hujus macula minuta prope basin et striga exteriori dimidii basalis, strigis nonnullis et limbo costali dimidii basalis corii, striga interiore et macula magna costali introsum angustata dimidii hujus apicalis, macula minuta membranæ ad angulum basalem exteriori et strigula obsolescente in

dimidio basali venarum ejus quattuor exteriorum, limbo epipleurali corii (exceptis macula parva basali oblongaque mox pone medium et ad apicem), macula obsoleta apicali acetabulorum, angulis posticis metasterni limboque laterali abdominis a basi segmenti tertii usque ad medium quinti (ad suturam quartam interrupto) pallide flavis; antennæ et rostrum flavo-testacea, articulis tribus primis illarum apice leviter fuscescentibus, quarto fusco, annulo lato subbasali palide flavo ornato, articulo ultimo rostri piceo; pedes flavotestacei, trochanteribus et parte basali femorum pallide flavis, coxis, apice trochanterum, femoribus anticis (quadrante basali excepto), parte minus quam dimidia apicali mediorum parteque plus quam dimidia apicali posticorum nigris, apice tibiæ fusco. Caput lobo antico pronoti æque longum, vertice oculo duplo latiore, articulo primo antennarum capiti æque longo, tertio quam secundo brevior et quam quarto longiore, articulis tribus ultimis ostri erecte pilosulis. Pronotum æque longum ac latum, lateribus post medium levissime sinuatum, lobo antico quam postico sesqui longiore, hoc punctulato. Hemelitra (♂) apicem abdominis parum superantia, corio modice dence punctato, limbo costali impunctato, macula pallida costali postmediana parse et minute dilute fusco-punctulata, intus rotundata. Pectus fere impunctatum. Abdomen subtus subtilissime et brevissime sericeum. Femora antica nonnihil incrassata, subtus per fere totam longitudinem biserialiter spinulosa, spinulis serici posticæ (exterioris) minoribus, serie antica (interiore) nonnihil ante apicem spina una majore prædita; tibiæ anticæ maris subtus tuberculis sex setulam rigidam spinuliformem gerentibus instructæ. Articulus primus tarsorum posticorum ceteris duobus unitis triplo longior. Long. ♂ 11.5mm.

Distinguished from the other Indian species by the longer pronotum.

*40. *Metochus Horni* Bredd.

After comparison of the male specimen found near Bombay with a Ceylonese male specimen of *Horni* (given by Mr. Green to Dr. Luther as being *M. uniguttatus*, Thunb.) I find that it differs only in having the yellow apical margin of the last dorsal segment extremely narrow while it in the typical Ceylonese form is broad, occupying the apical third of the segment. I quite agree with Breddin that *M. uniguttatus*, as previously understood, consists of several perfectly distinct species. What the true *uniguttatus* is, can only be decided by a thorough re-examination and minute redescription of the type. There can be little doubt that *M. bengalensis*, Dall. and *assimilis*, Dall. (the latter not mentioned in Distant's Indian Fauna) are good species. The difficulties in the study of this genus are increased by the circumstance that the pronotum in many (not all) species is of different structure in the two sexes, being narrower with much longer anterior lobe in the male.

N.B.—*Metochus* Scott, which corresponds to Stål's division *aa* of *Dieuches*, is certainly entitled to generic rank. The head is much broader than the apex of the pronotum, and the pronotal lateral margins are narrowly carinated and strongly sinuated, whereas in *Dieuches* the head is not or scarcely broader than the apex of the pronotum, and the pronotal lateral margins broadly laminately expanded and not or scarcely sinuated. Owing to this differences the *facies* of the two genera is quite different, and there are no species forming a transition between them. The differences between *Metochus* and *Dieuches* are in fact much greater than between *Dieuches* and *Beosus*. The name of the genus was correctly spelt by Scott; it was wrongly written *Methocus* by Lethierry and Severin] and *Metocus* by Distant.

Fam. HENICOCEPHALIDÆ.

41. *Henicocephalus basalis*, Westw.

Fam. REDUVIIDÆ.

42. *Polididus armatissimus*, Stål.

*43. *Nagusta macroloba*, Bergr.

In his Indian Fauna Distant has translated my Latin description of this species into English, but in two places the word *ocelli* is rendered with "eyes", the description of the pale markings of the head is quite incorrectly rendered, and the strongly produced lateral lobe of the female abdomen—one of the principal characters of the species—is not mentioned at all. I must therefore refer to my original description.

44. *Ribirbus trochantericus*, Stål.

The specimen (a ♂) resembles Reuter's variety *testacea*, but the head is black above, excluding the base. This species is so variable in colour that scarcely any two specimens are quite alike. It is not advisable to give names to these varieties. The black colour is more dominant in the female.

*45. *Epidaus alternus*, n. sp.

Fusco-testaceus, abdomine lateribus fusco, sed dimidio postico limbi lateralis segmentorum quattuor mediorum albido, articulo primo antennarum basin versus pallescente, femoribus anticis ferrugineis, annulo obsolete medio et distincto dimidii apicalis femorum annuloque dimidii basalis tiliarum albescentibus, pronoto et pectore breviter ochreo-sericeis. Caput pone antennis tuberculo parvo obtuso instructum, articulo primo antennarum capite, pronoto scutelloque unitis longiore, medium corporis superante, articulo primo rostri ceteris conjunctis æque longo, marginem posticum oculorum subattingente. Pronotum capiti æque longum, tuberculo angulorum apicalium brevi, sed apice acuto, spinis lobi postici longiusculis, acutis, asquilonis, spinis humeralibus extrorsum et sursum directis, marginibus lateralibus posticis pone spinas humerales-dente destitutis, angulis basalibus levissime obtuse prominulis. (Scutellum aculacsum, haud describendum.) Hemelytra apicem abdominis nonnihil superantia, corio subglabro, maculis parvis tomentosis destituto, cellula discoidali longiuscula, antice latiore et valde obliquata. Abdomen (♀) a basi sua fere usque ad medium segmenti sexti sensim leviter dilatatum, marginibus lateralibus hujus segmenti mox ante medium rotundato-angulatis, deinde fortiter convergentibus. Femora antica posticis paulo breviora, hæc articulo primo antennarum sat multo breviora. Long. ♀ 18.5 mm.

In size and colour, and in the shape of the abdomen, this species much resembles *E. kandyensis*, Dist., but the first antennal joint is longer, the pronotum is not mottled with ochraceous pile but evenly and not very densely sericeous the hemelytra are longer, and the lateral borders of the abdomen alternately coloured with fuscous and whitish.

On *Kandyensis* Distant founded the genus *Lanca*, which is a plain synonym of *Epidaus*, Stål. Distant (Rhyneh. Brit. Ind. II., p. 365) cites *Pnirsus*, Stål, in conformity with Stål's arrangement, as a subgenus of *Endochus*, but gives "disk of posterior lobe [of pronotum] unarmed" as a character of this genus, having apparently overlooked that the posterior pronotal lobe in the subgenus *Pnirsus* is armed with two discal spines. As a matter of fact *Endochus* contains in Distant's work only species without discal spines on the pronotum, and it is therefore possible that some or all of the new species described by him as belonging to *Epidaus* really belong to the subgenus *Pnirsus* of *Endochus*, as understood by Stål. The genera *Endochus* (incl. *Pnirsus*) and *Epidaus* were distinguished by Stål almost only by the structure of the scutellum, but this is variable to some extent in these genera. Distant's generic apportionment of the species of *Epidaus* and *Endochus* seems to me to be more natural than that of Stål, and

Psirsus ought to be regarded as a subgenus of *Epidaus*, not of *Endochus*. These groups should be distinguished in the following way.

A. Posterior lobe of pronotum with two discal spines.—*Epidaus*, Stål.

a. Scutellum a little raised toward the apex which is narrowly rounded.—Subg. *Epidaus* (s. str.)

b. Scutellum not raised toward the apex which is acute or angular.—Subg. *Psirsus*.

B. Posterior lobe of pronotum without discal spines.—*Endochus*, Stål.

The difference in the structure of the scutellum of the two subgenera of *Epidaus* is not in all species a very marked one, and they could possibly be united, although the tubercle behind the antennæ usually is less acute and spinelike in *Epidaus* proper than in *Psirsus*.—*Villanovanus*, Dist., is not even subgenerically distinct from *Endochus*.

46. *Rhinocoris fuscipes*, Fabr.

*47. *Rhinocoris cruralis*, n. sp.

Parce pilosus, sordide testaceus, parte postoculari laterali et superiore capitis (exceptis macula transversa inter ocellos lineaque media ab illa usque ad basin emissa), pectore medio atque abdomine nigris, gula fulvo-sanguinea, lobo antico pronoti piceo-testaceo, membrana fusca, macula subquadrata angulorum apicalium segmentorum abdominis albidâ, ventre intra spiracula transversim obsolete luteo-maculato; antennæ ferrugineo-testaceæ, annulo angusto subapicali articuli primi nigro et summo apice ejus albo, articulis duobus ultimis fuscis; rostrum et pedes obscure ferrugineo-sanguinea, articulo ultimo illius, coxis trochante-ribusque nigris, femoribus subtus infuscatis. Caput pronoto medio paullulo longius, parte postoculari quam anteoculari paullulo brevior, e supero visa basin versus sensim angustata, articulo primo antennarum capite paullulo brevior, supra parce piloso, pilis granulis minutis insidentibus, articulo secundo primo plus quam dimidio brevior, tertio secundo subæque longo articulo primo rostri parti anteoculari capitis subæque longo, sedundo premio paullo longiore. Pronotum latitudine basali hemelytrorum parum latius, impressione media lobi antici usque ultra medium lobi postici extensa, ad basin lobi antici plica nulla transversa interrupta, tuberculo angulorum apicalium parvo, subacuto, angulis lateralibus rotundatis, basalibus breviter lobatis. Scutellum summo apice fortiter recurvum. Hemelytra apicem abdominis paullum superantia, corio præsertim in venis concoliter sericeo. Pleuræ ochreo-sericeæ. Abdomen hemelytris clausis sat multo latius, spiraculis post medium segmentorum sitis. Tibiæ posticæ medio per partem circiter quintam longitudinis earum paullo incrassatæ, parte incrassata in latere infero-interiore dense adpresse albo-sericea. Long. ♀ 11 mm.

This remarkable species has no other near ally than *Rh. longifrons*, Stål, upon which Stål founded the subgenus *Charontus*. It differs from that species by the shorter basal antennal joint and second rostral joint, the non-compressed but on its interior under-side densely sericeous incrassated part of the hind tibiæ, and by the different colouring. By the lack of the fold separating the median impression of the anterior pronotal lobe from the transverse impression it differs from the genus *Rhinocoris*, but it has so much in common with *Rh. longifrons* that it cannot be placed in *Sphedanolestes*, from which it differs in the robust (though not large) stature and the quite dissimilar *facies*.—In his Indian Fauna Distant has published an abridged translation of the description of *Rh. longifrons*, but has omitted its principal specific and subgeneric character, by which it differs from all previously known species, *viz.*, the remarkable structure of the hind tibiæ.

*48. *Glymmatophora segnis*, n. sp.

Levissime subnitida, nigra, dorso abdominis opaco cum connexivo et margine laterali ventris rufo, sed figura magna T-formi nigra a basi ejus

usque in basin segmenti penultimi extensa signato, area magna ovali media ventris a basi segmenti secundi ad medium sexti extensa sanguinea. Caput transversim rugosum, clypeo prominente, prope basin rotundato-angulato, lamina squamiformi genarum limbo obscure lutescente, tumulo ocellifero leviter elevato sed lato, articulo primo antennarum capite quarta parte brevior, supra parum sed subtus sat dense erecte piloso, articulis tribus subsequentibus dense breviter pilosis et praeterea pilis parvis longis exsertis praeditis, secundo primo tertia parte longiore, tertio quam secundo fere dimidio brevior et quam quarto nonnihil longiore (art. duo ultimi desunt). Pronotum latitudine sua paullulo brevius, laeve, loboantico quam postico paullo latiore et duplo longiore, angulis apicalibus late rotundatis tuberculo destitutis, marginibus lateralibus obtusissime convexis. Scutellum basin abdominis paullulum superans, medio longitudinaliter impressum. Hemelytra etiam maris rudimentaria, squamiformia, medium scutelli paullum superantia, margine obscure lutescentia. Meso-et metasternum coalita, non sutura sed tantum impressione subtili discreta, parte mesosternali media late sed haud profunde excavata, parte metasternali tumido-convexa et insuper elevatione media longitudinali subcariniformi abbreviata instructo. Latera meso-et metapleuræ e supero distinguenda. Abdomen supra (margine laterali connexivi et segmento secundo dorsi exceptis) transversim rugosum, lorso praeterea (segmentis primo, sexto septimoque exceptis) utrinque longitudinaliter impresso, ventre laevi, segmento Primo medio longitudinaliter rugoso, margine basali segmentorum quattuor mediorum, lateribus exceptis dense breviter carinulato-crenulatis, segmento sexto maris ante marginem apicalem impressione curvata sat profunda medio interrupta instructo, segmento genitali maris longitudine paullo latiore, stylis genitalibus apicem impressum et truncatum versus dilatatis. Femora antica subtus prope medium dente gemino, femora media ibidem dente simplice et magis apicem versus dente gemino, femora postica nonnihil ante apicem dente simplice armata; fossa spongiosa tibiaram anteriorum trientem earum occupans. Long. ♂ 23 mm.

Not easily confounded with any previously described species. Belongs, as the other Asiatic species, to the subgenus *Hæmatorrhophus*. As recently shown by Horváth, *Glymmatophora* is generically distinct from *Ectrichodia* Lep. Serv. (*Physorhynchus* Am. S.)

49. *Pirates mundulus*, Stæl.

50. *Lestomerus affinis*, Serv.

Apterous female: Anterior lobe of pronotum scarcely narrower than posterior lobe and three times longer than it. Scutellum reaching base of abdomen. Hemelytra rudimentary, as long as the scutellum, without membrane but with the clavus separated from the corium by a distinct suture.

* 51. *Lestomerus Wroughtoni*, n. sp.

Ventre nitido excepto subopacus, niger, capite superne, rostro, lobo antico pronoti, limbo basali lobi hujus postici, vitta obliqua sublaterali hunc limbum cum margine apicali lobi conjungente pedibusque (coxis exceptis) ferrugineo-testaceis, femoribus medio infuscatis, parte plus quam dimidia apicali clavi, macula magna oblonga adjacente corii maculaque parva triangulari ad marginem basalem membranæ paullo ante angulum apicalem corii dilute ochraceis, macula hac membranæ extus paullo ultra apicem corii lineariter retrorsum producta, connexivo supra et subtus luteo-ochraceo; totus cum rostro et pedibus sat longe et dense ochreo-sericeus, sed scutello, clavo ac corio (locis pallidis exceptis) breviter erecte nigro-pilosis, femoribus anterioribus subtus dense breviter erecte villosis. Caput apice pronoti paullulo latius et apice prosterni angustius, vertice oculo duplo et dimidio latiore, oculis quam parte postoculari haud magis prominulis, e supero visis latitudine

multo longioribus, ocellis inter se et ab oculis subæque longe remotis; (antennæ desunt). Pronotum subæque longum ac latum, lobo antico lineis nonnullis angustis lævigatis sat obsoletis prædito, impressione ejus media subtili, e basi ad medium extensa. Scutellum apice horizontale, breviter productum. Hemelytra apicem dorsi abdominis attingentia, cellula anteriore membranæ apicem acutum versus subsensim angustata. Femora antica fortiter incrassata, subtus spinulis nonnullis in tomento suboccultis armata; femora media modice incrassata, subtus inermia. Fossa spongiosa tibiæ anteriorum paullo minus quam dimidium earum occupans. Long. ♀ 14 mm.

Seems to be more related to *L. sanctus*, Fabr., than to any other described species, but it is very distinct from that species in the narrower head, narrower and much less prominent eyes, apically acute (not truncate) inner cell of membrane, unarmed middle femora, and quite different coloration of most parts of the body.

52. *Ectomocoris quadriguttatus*, Fabr.

53. *Ectomocoris cyaneus*, Stål.

Of this splendid species only the single type specimen from "India" was hitherto known. It seems to be somewhat variable in colour. In the specimen found by Mr. Wroughton the whole apical third of the clavous is white, the adjacent white spot of the corium is much larger than in the type, the middle femora are dark ferruginous above (except at apex), the hind tibiæ are fuscous toward the apex, and all tarsi are darker. The connexivum has both above and beneath a whitish spot at the base of each segment. These spots are not mentioned by Stål and Distant, but are probably present also in the type.

* 54. *Tapinus Reuteri*, Bergr.

55. *Acanthaspis quinquespinosa*, Fabr.

* 56. *Pasiropsis nigerrima*, Bergr.

57. *Oncocephalus philippinus* Leth., Bull. Soc. Ent. Fr. 1877, p. 101; Reuter, Acta Soc. Sc. Fenn. XII, 717, pl. II, fig. 29 (1883).

This species, though not common, seems to be widely spread in southern Asia. It is not mentioned by Distant in his Indian Fauna, but is possibly one of the many species of which his so-called "*O. annulipes*, Stål" is made up. Stål founded his *annulipes* on a single specimen from Natal, and Reuter has shown in his Monograph that no other specimen of it has yet been found. Stål later confounded several other forms with it, recording it (1874) from Sierra Leone, China, the Philippine Islands, Australia, and New Caledonia; but these specimens respectively belong to *O. fuscescens*, *scutellaris*, *assimilis*, *confusus*, and *curvispina*, all described by Reuter. Distant has again recorded *annulipes* from different parts of Africa and Asia, and from New Guinea, but the size given by him—"14 to 24 millim"—is sufficient to show that *annulipes* Dist. nec Stål includes many different species.

* 58. *Bagauda avidus*, Bergr.

Fam. NABIDIDÆ.

59. *Nabis flavomaculatus*, Leth.

60. *Reduviolus*, sp.

A species of the subgenus *Stenonabis*, possibly belonging to *R. nigrescens* Dist., though not quite agreeing with the description.

Fam. MIRIDÆ.

61. *Lucitanus punctatus*, Kirby.

Fam. GERRIDÆ.

* 62. *Onychotrechus sakuntala*, Kirk.

The specimens are intermediate between this form and *O. rhevenor*, Kirk., which must be united, as suggested by Distant. Mr. Wroughton found both the winged and the apterous form. The latter is coloured almost as the same form of *O. vadda*, Dist., but the second antennal joint is much longer than the third, the middle femora are a trifle shorter than the posterior ones, and the slightly curved setiform apical appendage of the middle and hind tarsi—a formation well represented by Mr. Distant's drawer in a detail-figure of *O. vadda*, but not mentioned in Kirkaldy's and Distant's descriptions—is shorter, more slender, and not fimbriated toward the base. This tarsal appendage is lacking in the allied genus *Eotrechus*, Kirk., but occurs, more or less modified, in some other genera of Gerridæ. The claws in the species of *Eotrechus* and *Onychotrechus* are very dissimilar to those of the other Gerrids, being long and rather stout, evenly curved in *Eotrechus*, straight and only apically curved in *Onychotrechus*, in both genera provided with long free arolia. It might be inferred *a priori* that their habits are different from those of the other Gerrids, and from a very interesting observation made by Mr. E. E. Green in Ceylon there can in fact be no doubt that they do not live on the surface of ponds or streams like the other "water-striders." He found *Onychotrechus vadda* "on perpendicular rocks with trickle of water: going in pairs, not actually *in coitu*, but the male clinging on back of female." These insects could certainly not climb precipitous wet cliffs with claws constructed as in the other Gerridæ, least of all with a burden on their back.

Fam. BELOSTOMATIDÆ.

63. *Sphærodema rustica*, Fabr.

Suborder HOMOPTERA.

Fam. FULGORIDÆ.

* 64. *Putala maculata* Dist.

Fam. CERCOPIDÆ.

* 65. *Cosmoscarta relata* Dist.

Fam. MEMBRACIDÆ.

66. *Leptocentrus taurus* Fabr.

Some specimens agree better with *L. substitutus*, Walk., but the differences between these two species are so slight that I think they cannot be separated.

Fam. PSYLLIDÆ.

67. *Diaphorina guttulata*, Leth., Proc. Asiat. Soc. Bengal 1890, p. 165.